

# Appendix L. Capital planning process

## L.1 Introduction

This Capital Process description provides an overview of the T&D (Transmission & Distribution) processes, roles, and responsibilities for T&D Project governance from budget-setting to project ideation to funding authorization. The Capital Portfolio team governs this process, monitors project statuses throughout the project lifecycle, and acts as custodian on behalf of the Business Sponsor Group (BSG) and the Capital Review Group (CRG) of a prioritized five-year roadmap.

### L.1.1 ROLE DEFINITIONS

- **Board of Directors (BOD)** – The Board of Directors reviews and approves the annual capital budget. In addition, the BOD approves large strategic projects and future-year obligations for long-lead-time equipment purchases.
- **Capital Review Group (CRG)** – The Capital Review Group is a standing committee with governance over capital projects and allocates capital resources based on business value and alignment with PGE’s strategy.
- **Business Sponsor Group (BSG)** – The Business Sponsor Group is a standing committee, empowered by the CRG to approve capital projects and manage the assigned portfolio to deliver the most value at the least cost. The BSG reviews and approves a proposed annual budget based on a five-year project road map that prioritizes projects based on PGE’s initiatives and project readiness.
- **Generation, Transmission & Distribution Project Management Office (G-T&D PMO)** – The G-T&D PMO is an organization that manages a standardized process for the governance and execution of assigned capital projects for Generation and T&D.
  - Project Manager
  - Project Controller
  - Estimator
  - Construction Manager
- **Capital Portfolio Management** – The Portfolio Management team optimizes the project portfolio, acts as the primary interface with the BSG and CRG, and oversees the steps related to the planning and execution gates. The Portfolio Management team also monitors Portfolio health and execution risks throughout the year, escalating issues to the executive team and the CRG as needed. The Capital Portfolio team has several functions and specialties within the group. They are:
  - **Portfolio Manager** – Manages day-to-day portfolio activities, including but not limited to balancing portfolio, evaluating project trade-offs, recommending projects, and delivering portfolio at maximum value.
  - **Financial Analyst** – Perform portfolio financial modeling, track portfolio health, and maintain portfolio reporting.
  - **Capital Project Sponsor (CPS)** – Evaluate and recommend projects based on benefits and alignment to corporate strategy. Ensures scope, budget, and schedule are complete before authorization.
- **Asset Management Planning** – The Asset Management Planning (AMP) team creates risk-based economic models to prioritize capital investments based on the asset failure risk and asset replacement cost.
- **T&D Planning** – The T&D Planning team provides transmission and distribution planning analysis to recommend necessary capacity and customer-driven T&D projects over a five-year planning horizon.
- **Distribution Operations Engineering** – The Distribution Operations Engineering (DOE) team manages the day-to-day operations and health of the distribution grid, including but not limited to maintenance, improvement, and optimal use.

- **Substation Maintenance** – The Substation Maintenance team manages the health of substation assets. Their responsibilities include executing a comprehensive maintenance program and addressing real-time performance issues.

## L.2 Capital budget setting

PGE employs a simultaneous bottom-up and top-down approach to cost management, with multiple layers of controls. PGE's annual capital budgeting process is governed primarily by three groups:

- PGE's Board of Directors (BOD),
- the Capital Review Group (CRG), and
- Business Sponsor Groups (BSG).

This is a layered process which is explained in more detail below. From the "bottom-up," based on rigorous review of a project's need, scope, budget, and forecast, the BSG approves a portfolio of projects for funding. This is shared with the CRG which adjusts funding priorities across PGE. The aggregate annual budget is presented to the BOD for review and approval. The rigorous review is continuous, and the BOD budget review is performed once annually with incremental changes and revisions submitted and reviewed as needed. From the "top-down," the BOD is the ultimate decision-maker for determining the amount of capital available across PGE. The CRG then allocates this to BSGs based on funding allocation priorities, and then each BSG manages its allocation by reprioritizing and balancing its portfolio of projects.

The BOD is responsible for reviewing and approving the annual capital budget. In addition, the BOD approves large strategic projects and future-year obligations for long-lead-time equipment purchases. To the extent additional capital funds are needed after the annual budget is approved, the BOD must approve any additional spending. Finally, the BOD also determines the CEO's extended approval authority, which provides the CEO with limited authority to approve budgets over the BOD-approved amount. The annual capital budget is recommended to the BOD by the CRG. The CRG develops the proposed annual budget based on the rigorous portfolio development and management of each BSG and evaluates the use of funds throughout the year on a monthly basis. Each BSG develops a proposed annual budget based on its three- to five-year project road map that prioritizes projects based on PGE's strategic initiatives to benefit customers and project readiness.

PGE incorporates a multi-year outlook in our capital planning and management in several ways. The BSG develops three- and five-year roadmaps which estimate projects over a longer-term duration. This provides the BSG with a broader view of the portfolio and enables the portfolio manager to balance project priority and cost management. The roadmaps enable portfolio managers to maintain funding stability over time and allow PGE executives to monitor the overall trend of the capital programs. PGE also employs analytical tools like asset risk models, system planning models, customer forecasts, and community development plans to help drive long term plans. With this multi-year perspective, PGE leaders can carefully balance customer price impacts with the need to invest in a reliable and safe system.

Portfolio Management refers to the management of the entire portfolio within a particular area, such as T&D. The two primary leadership roles in Portfolio Management are performed by the BSG leadership and a Portfolio Manager. Portfolio Management decides when projects are ready to move from the roadmap to active work, allocates funds to projects based on performance, approves projects at stage-gate milestones, monitors portfolio execution and delivery of benefits, manages portfolio exceptions, and escalates issues to the CRG as needed. The Portfolio Manager verifies that projects benefit customers by aligning with and delivering on PGE's strategy, allocates budgeted dollars to projects based on performance, approve stage gate milestones for projects, monitors portfolio execution and benefits delivery, manages project expectations, maximizes value in the portfolio, actively balances the portfolio, and identifies and escalates

Figure 81. Capital governance structure



issues, as needed. Project Management refers to the management of an individual project through the process by a Project Managers. The Project Manager manages a project’s progression through the planning and execution stage-gates and helps keep the project on schedule and within the budget, as discussed in more depth below.

The T&D Capital Project Process is structured into the following sections:

- Project/Program Development
- Project Qualification
- Project Prioritization
- Project Authorization

## L.3 Project/program development

New program and project ideas come from various sources within PGE. These sources are described below as inputs. PGE employs analytical tools like asset risk models, system planning models, customer forecasts, and community development plans to help drive long-term capital project priorities. These inputs and outputs are represented in **Figure 82**.

### L.3.1 AMP RISK ANALYSIS

For business cases, AMP utilizes an evaluation tool known as the Integrated Planning Tool (IPT) for each analysis. The team identifies and loads in the assets from the project using respective life cycle models. The tool enables a comparison of the current state to various project options to calculate the reduction in life cycle cost of ownership, risk, and other reliability metrics to determine the optimal economic solution.

### L.3.2 OPERATIONS REQUESTS

Operations requests originate from maintenance activities by departments such as Substation Maintenance, Transmission Engineering, and Distribution Operations Engineering.

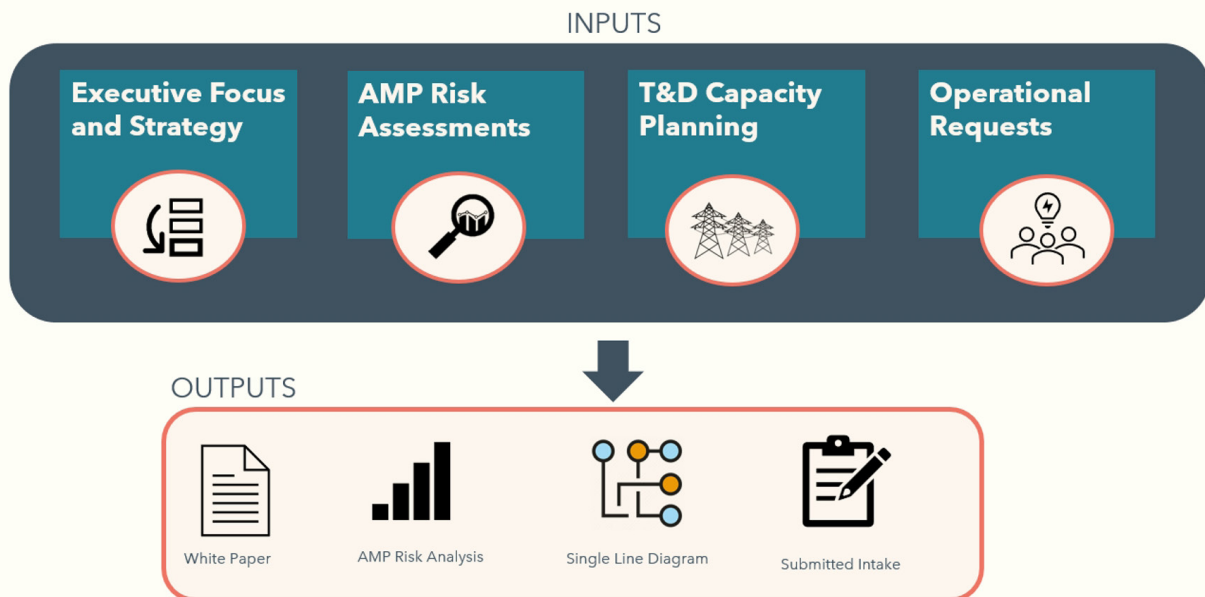
### L.3.3 EXECUTIVE FOCUS

PGE’s executive focus is on emerging high-profile initiatives such as Wildfire Mitigation and Resiliency, core infrastructure, and resiliency.

Outputs may include, but are not limited to:

- Study reports
- One-line diagrams
- AMP Risk Analysis
- Submitted Project Intake Form

Figure 82. Project and program inputs and outputs



## L.4 Project qualification

The project qualification process, also known as the T&D Capital Intake process, begins with identifying a project or program need. The Capital Project Sponsor administers this process by reviewing the project demand submittal and coordinating between subject matter experts (SMEs). This results in an initial project concept with a vetted scope, benefits, cost, and schedule. The process concludes with a project demand recommendation (via the T&D Project Intake Tool).

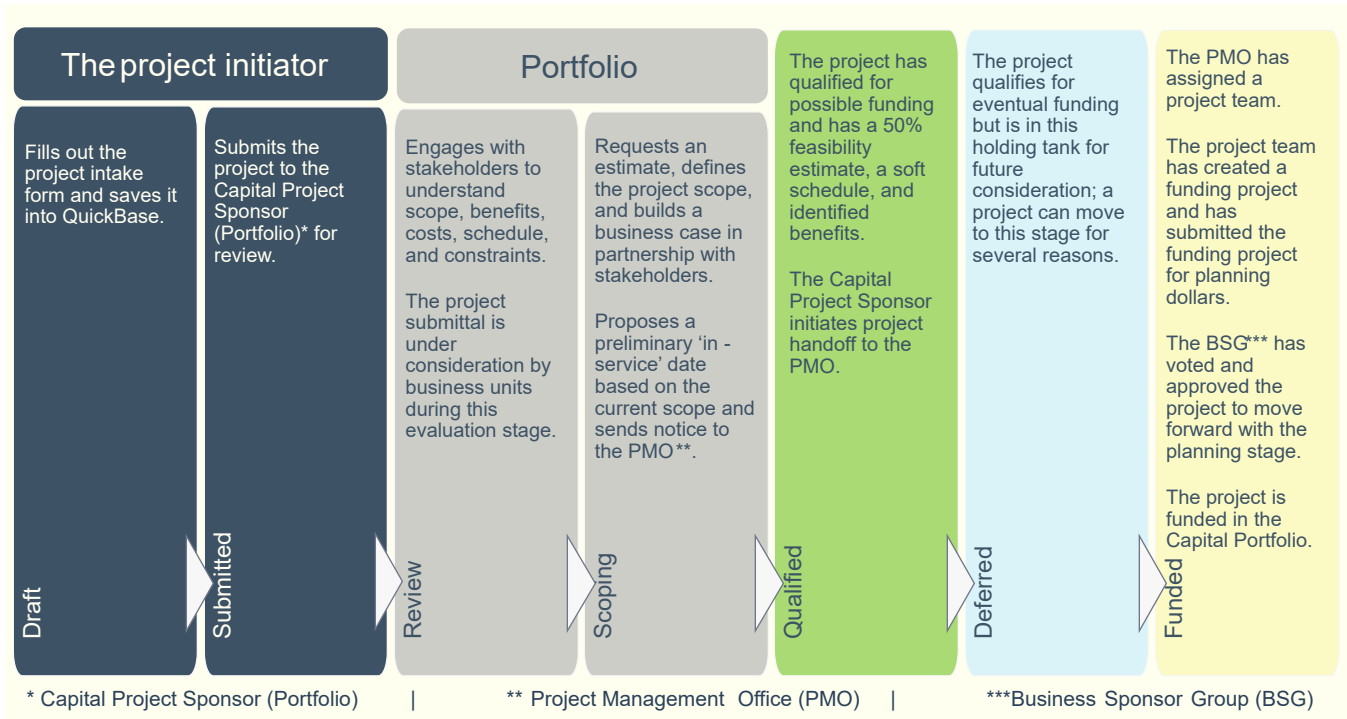
The Capital Portfolio team uses the T&D Project Intake Tool to collect project demands. This tool facilitates project evaluation on multiple criteria. The Intake Tool has been developed on the QuickBase platform and can be accessed via a web browser.

All employees within T&D have basic access to the T&D Project Intake Tool. Additional transmission-level access is provided to staff with proper FERC (Federal Energy Regulatory Commission) level access to transmission data. When requesting evaluation of a project demand, the requester must enter a minimum amount of information, including project scope, alternatives considered, schedule, and budget information.

## L.5 T&D project intake process

Each project demand follows a prescribed lifecycle, which tells requester(s) the status of their request. **Figure 83** describes the Project Intake Lifecycle graphically.

Figure 83. Project demand intake lifecycle and status detail



Once an Intake is submitted, an automated email notifies the Capital Sponsorship team. Then a Capital Project Sponsor will schedule a review meeting with the requester(s) to determine any additional information needs.

The Intake will enter the Scoping status while anything missing or unclear from the qualification inputs is addressed. Depending on the degree of the incomplete information, the Capital Project Sponsor may schedule an additional review meeting(s).

## L.6 Project prioritization

The Portfolio team develops an annual five-year Capital Project Roadmap. The T&D BSG reviews and approves the roadmap and issues it every June to help establish the priority for the years ahead. Many groups provide input to the roadmap's development, including System Planning, Asset Management, Operations, Project Management, and Supply Chain. It is a living document that the Portfolio team manages monthly. The project prioritization process results in project inclusion on the roadmap.

Prioritization inputs include:

- Qualified Project Demand from Capital Project Sponsor
- Resource Availability
- Material Availability
- Cash Flow
- AMP Risk Register

Prioritization outputs include:

- Updated T&D Capital Roadmap
- Resource Plan
- Long Lead Equipment authorization
- Project authorization

Upon completing the details and a recommendation from the Capital Project Sponsor, the project demand awaits review and qualification determination by the Portfolio Manager. During the qualification determination, the Portfolio team may consider additional factors, including strategic alignment, project dependencies and overlap with other projects.

### L.6.1 PORTFOLIO DEFINITION

PGE invests in capital projects for many reasons. Some projects are discretionary, and some are non-discretionary. It is important to capture the drivers for the project in a manner that is quick and easy to understand. For the Base Portfolio, the T&D BSG established two sub-portfolios: Grow the Business (GTB) and Sustain the Business (STB).

At a high level, this sub-portfolio classification helps PGE understand if our company is balancing growth with core business investments. Examples of STB investments are aging asset replacements and work to keep the lights on. GTB investments are mainly new customer load requests or capacity-driven projects due to load demands.

In addition to the sub-portfolio classification, each sub-portfolio has a set of categories to help provide more details on the nature of the investments (**Figure 84**).

Figure 84. T&D capital investment categories

Portfolio	Sub-Portfolio	Category
Transmission and Distribution	Grow (load growth/e con. dev.)	<b>Capacity/Flexibility</b> –increase capacity and/or flexibility to address load growth or increased demand; may include capacity -driven compliance and reliability projects
		<b>Customer/Partner</b> –investments involving a commitment to a customer, internal partner, municipality, or co -owner; includes critical service restoration and our obligation to serve; applicable to both sustaining and growth sub -portfolios
	Sustain (keep the lights on)	<b>Compliance</b> –address a non -capacity related compliance requirement from FERC, NERC, OPUC, EPA, DEQ or other regulatory body
		<b>Reliability</b> –enhance reliability, resiliency and security; includes proactive repair/replace in kind projects as well as broader improvement initiatives
		<b>Operations</b> –address tools, safety, restoration of non -critical services, and efficiency improvements

Before funding authorization, every project entering the Portfolio is assigned a sub-portfolio and category. The main driver of the project is used to determine the sub-portfolio and category assignments. There can be only one sub-portfolio and one category assignment per project, even though there may be multiple reasons for the investment. System Planning and/or the AMP team help provide a sub-portfolio and category assignment, depending on where the project originated.

Using the sub-portfolio and categories together, the T&D BSG can quickly see what projects are discretionary versus non-discretionary. For example, non-discretionary projects are GTB-compliance/customer or STB-compliance/customer since there are firm customer or compliance commitments. Discretionary projects fall in the remaining categories, such as operations, reliability, and capacity. Examples of discretionary projects are proactive asset replacements and asset health and reliability mitigation.

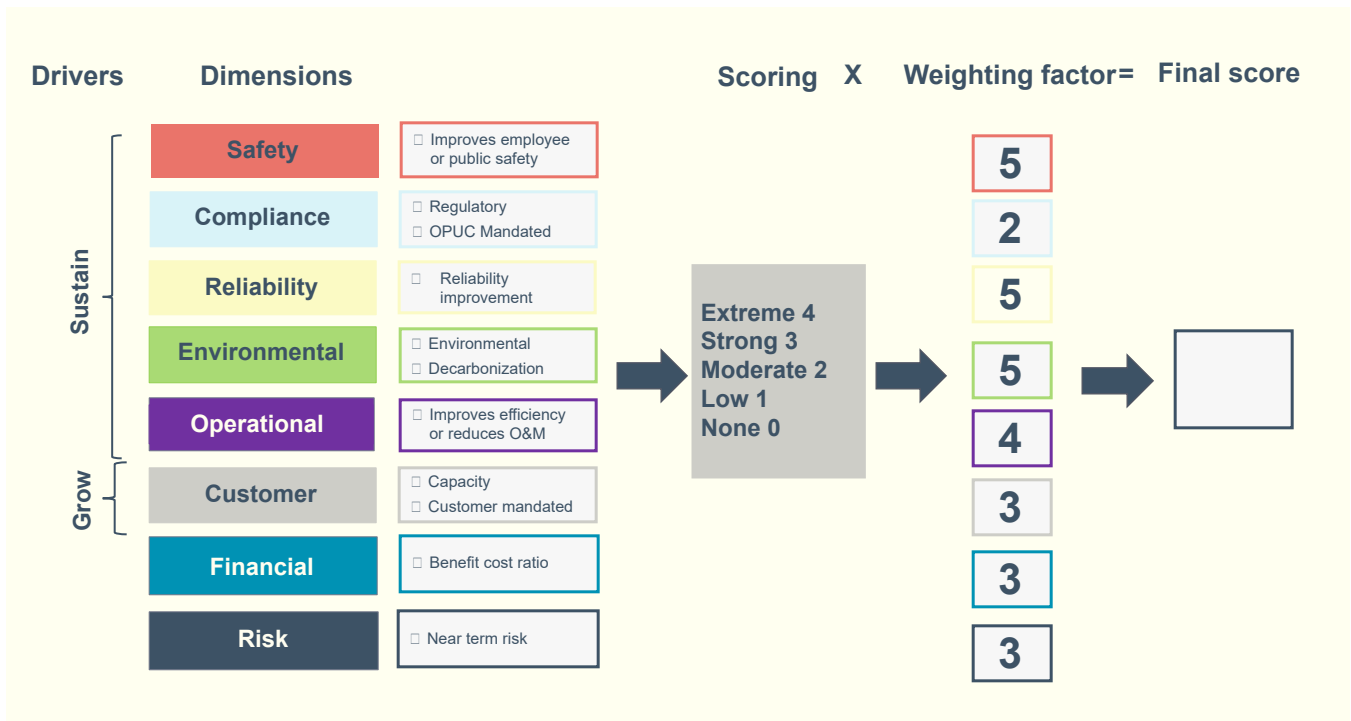
## L.7 T&D capital roadmap

The T&D Capital Roadmap provides a five-year forecast of all the current and future projects in the portfolio at the Funding Project (FP) level. The planned forecast dollars are split across all the phases of a project or program.

In addition to portfolio definition and Roadmap, the Portfolio is establishing a value framework where every project gets a score based on various dimensions. The value framework encompasses eight dimensions that help our capital investments align with our corporate commitments. The framework is illustrated in **Figure 85**.

To promote fair and diverse assessments of projects, the Portfolio team enlists the help of other departments such as System T&D, Operations Engineering and Asset Management to collectively and objectively score the work. Realizing that work can originate from different groups, this approach helps provide balanced scoring and transparency.

Figure 85. T&D portfolio scoring framework





## L.8 Authorization

Once a project demand is developed, qualified and prioritized, it goes through a final process for authorization. This is the last step required to fund the project/program and hand it off for execution. It is important to note that not all project demands go through authorization immediately. Only project demands that are prioritized in the current calendar year go through authorization. Some project demands may be developed, qualified but prioritized in future years. These projects will remain in the backlog of qualified demands.

Once authorized, a demand obtains the 'Qualified' status, and the Capital Project Sponsor transfers ownership of project execution to the PMO. At this stage, the project has a vetted and defined scope, a concept estimate for the planning gate, an initial Project Scoping Document, an initial project benefits list, an initial project risk list, and a high-level schedule, if applicable.

## L.9 Create a funding project

Once the project handoff meeting is complete, the PMO will create a funding project within PGE's system of record, PowerPlan. The Project Controller will enter a project justification, create the necessary accounting work orders (AWOs) to segregate the work into funding streams for the project, enter a project cashflow forecast into PowerPlan and enter a project in-service date.

The funding project is a record of all budget requests, authorizations, and stage gating checklists associated with the project.

## L.10 On-going portfolio management

All active projects roll up into the overall T&D Portfolio. The Capital Portfolio team will perform recurring activities such as reviewing project forecasts, monitoring project cash flow and variances and evaluating overall health of the Portfolio.